

**IN THE SPECIFICATION:**

**Please amend the specification as follows:**

**Please delete paragraph [0004] and substitute therefore the following:**

[0004] The AR coating operates to match the impedance (or admittance, the reciprocal of impedance) between the gain media and the surrounding media. The surrounding media is typically air having a refractive index of n about equal to 1, very close to that of a vacuum. The amount of light reflected is dependent on several factors including the wavelength of the light, polarization, the reflective indices of the media, and the incident angle of the light itself.

**Please delete paragraph [0017] and substitute therefore the following:**

[0017] The goal of an AR coating is to match the admittance (or match the impedance if you prefer) of the gain medium 10, which in the case of InGaAsP has an admittance of 3.28 (about equal to 3.3), to the immersing air medium 18 of having an admittance of about 1.00. Paths in this diagram accumulate positive phase, shown always as a clockwise path. Any combination of materials and arc lengths that lead in combination from the admittance of the gain medium 10 ( $n=(3.28, 0)$ ) to the admittance of air

( $n=(1.00, 0)$ ) on the complex plane is a potentially valid AR coating. The arc lengths of each segment change inversely proportional to the change wavelength output by the gain medium 10. As a result, one generally prefers the thinnest coating (shortest arc lengths), as a unit change in wavelength results in the smallest deviation from perfect anti-reflection. Hence, even thin, but high performance AR coatings suffer an unavoidable deviation from ideal anti-reflection away from the design wavelength.